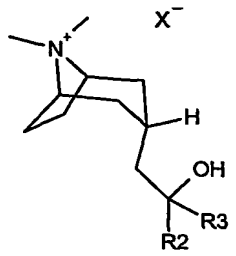
What is claimed is

1. The compounds shown by Formula (I), hereinbelow:



(I)

wherein:

R2 and R3 are, independently, selected from the group consisting of straight or branched chain lower alkyl groups (having preferably from 1 to 6 carbon atoms), cycloalkyl groups (having from 5 to 6 carbon atoms), cycloalkyl-alkyl (having 6 to 10 carbon atoms), 2-thienyl, 2-pyridyl, phenyl, phenyl substituted with an alkyl group having not in excess of 4 carbon atoms and phenyl substituted with an alkoxy group having not in excess of 4 carbon atoms; and

X^- represents an anion associated with the positive charge of the N atom;

such that the compound is a quaternary salt.

2. A compound according to claim 1 wherein the orientation of the alkyl chain attached to the tropane ring is endo.

3. A compound according to claim 2 selected from the group consisting of:

(3-*endo*)-3-(2-Hydroxy-2,2-di-2-thienylethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*endo*)-3-(2-Hydroxy-2,2-diphenylethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*endo*)-3-[2-Hydroxy-2-phenyl-2-(2-thienyl)ethyl]-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*endo*)-3-(2-Cyclohexyl-2-hydroxy-2-phenylethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*endo*)-3-(3-Cyclohexyl-2-hydroxy-2-phenylpropyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*endo*)-3-[2-Hydroxy-2-phenyl-2-(2-pyridinyl)ethyl]-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide; and
(3-*endo*)-3-(2-Hydroxy-2,2-diphenylethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane 4-methylbenzenesulfonate.

4. A compound according to claim 1 wherein X^- is selected from the group consisting of chloride, bromide,iodide, sulfate, benzene sulfonate and toluene sulfonate.

5. A pharmaceutical composition for the treatment of muscarinic acetylcholine receptor mediated diseases comprising a compound according to claim 1 and a pharmaceutically acceptable carrier thereof.

6. A method of inhibiting the binding of acetylcholine to its receptors in a mammal in need thereof comprising administering a safe and effective amount of a compound according to claim 1.

7. A method of treating a muscarinic acetylcholine receptor mediated disease, wherein acetylcholine binds to said receptor, comprising administering a safe and effective amount of a compound according to claim 1.

8. A method according to claim 7 wherein the disease is selected from the group consisting of chronic obstructive lung disease, chronic bronchitis, asthma, chronic respiratory obstruction, pulmonary fibrosis, pulmonary emphysema and allergic rhinitis.

9. A method according to claim 7 wherein administration is via inhalation via the mouth or nose.

10. A method according to claim 7 wherein administration is via a medicament dispenser selected from a reservoir dry powder inhaler, a multi-dose dry powder inhaler or a metered dose inhaler.

11. A method according to claim 7 wherein the compound is administered to a human and has a duration of action of 12 hours or longer for a 1 mg dose.

12. A method according to claim 11 wherein the duration of action is 24 hours or longer.

13. A method according to claim 12 wherein the duration of action is 36 hours or longer.